

HDR

WATER MANAGEMENT PLANNING VALUES

UPPER PLATTE RIVER BASIN

- Generational Stewardship
- Maintaining the good life
- There is a space for all; willingness and interest in working together; shared burden
- Looking beyond our own fences
- Others can make good use of the water we save
- We are making a difference!
- We have a long culture of adapting and changing with the times
- *“Putting water back to the river without causing economic harm”*

Established May 2017



I. ADMINISTRATION

THIS IS AN OPEN MEETING

NOTICED IN:

- Scottsbluff Star Herald
- North Platte Telegraph
- Sidney Sun-Telegraph
- Kearney Hub
- The Grand Island Independent

REVIEW SPG DECISION-MAKING PROCESS

- The first goal is consensus
- A majority vote is the determining factor for all sections of the plan.
- If the group cannot reach a majority, the NeDNR and the NRDs will work together to resolve the disputed issues.
- If the SPG is unable to come to consensus by June 2018, the NeDNR and the NRDs will work together to resolve the disputed issues and create a final plan by August 2018.

JULY MEETING RECAP

- Key Discussion Highlights
- Explore Existing Economic Indicators

ISSUES TO BE ADDRESSED

SECOND INCREMENT

<p><u>Administrative</u></p> <ul style="list-style-type: none">• Revisit order of goals• Define FA (unknown numbers)• Timeline; number of increments• Meter the whole state?• Have we jumped from fully to over?	<p><u>General Management</u></p> <ul style="list-style-type: none">• Oversight• Monitor progress (score sheet)• Improved model for lower reaches• Accounting for surface water appropriators• Offsets based on timing and locations
<p><u>Economic, Social, Environmental</u></p> <ul style="list-style-type: none">• Food & clean water for future generations• Water quality• Fish, Wildlife, park lands• Check valves on wells• Economic analysis (scenarios)• Management of the Resource• Funding Variability	<p><u>New Sections / Additional</u></p> <ul style="list-style-type: none">• Drought conditions• Storage capacity & maintenance• Conjunctive Management (ground & surface)• Power



II. PATH FORWARD

ROADMAP THROUGH JANUARY '18

- September 20, 2017
 - Definition of Additional Elements from 46-715
- November 15, 2017
 - Refinement of New Goals & Objectives
 - Social and Environmental Health, Safety, Welfare
 - Identification of 2nd Increment Intent – Discuss Target
- January 17, 2018
 - Review and Discussion of Annotated 1st Increment
 - Identify Additional Missing Elements
 - Set roadmap for March, May, July 2018

STATUTE 46-715 INTERPRETATION

Nebraska Revised Statute 46-715 (2) In developing an integrated management plan, the effects of existing and potential new water uses on existing surface water appropriators and ground water users shall be considered. An integrated management plan shall include the following:

- a) Clear goals and objectives with a purpose of sustaining a balance between water uses and water supplies so that the economic viability, social and environmental health, safety, and welfare of the river basin, subbasin, or reach can be achieved and maintained for both the near term and the long term*

STATUTE 46-715 INTERPRETATION

WATER USE & SUPPLY BALANCE



NONE

Use none of the water in the system

TARGET SPECTRUM

Where we are on the 'Target Spectrum' is determined by stakeholders' value of the following as referenced in § 46-715:

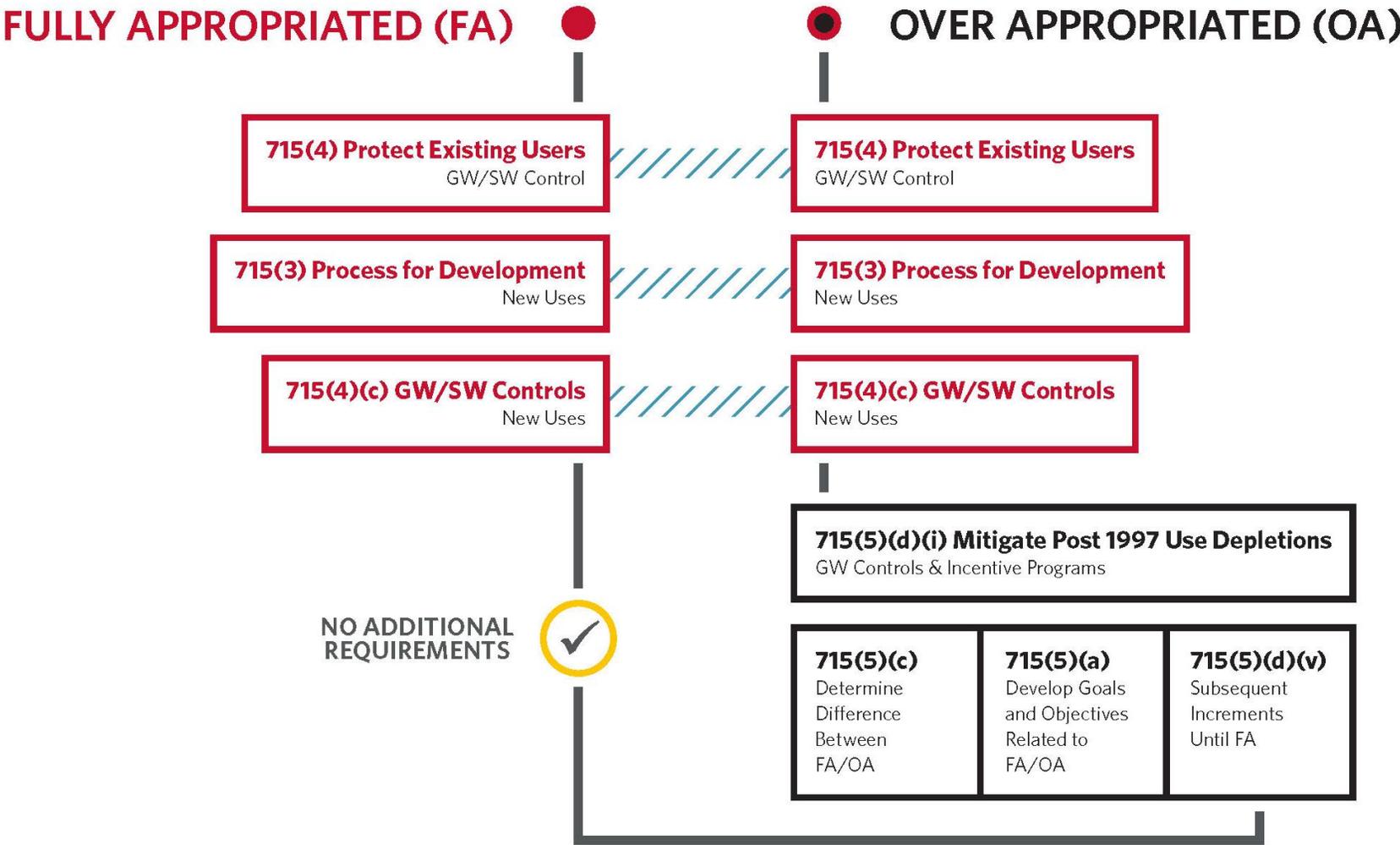
- ✓ **Economic Viability**
- ✓ **Social & Environmental Health**
- ✓ **Safety**
- ✓ **Welfare of the Basin**

ALL

Use all of the water in the system

STATUTE 46-715 INTERPRETATION

FA / OA DETERMINATION



WHAT ARE YOU WILLING TO DO?

SPG GUIDANCE



PROJECTS

- Conjunctive management
- Retirements
- Leases
- Augmentation Wells
- New Storage

REGULATION

GW Controls

- Allocations
- Low CU Crop Rotation
- Acre Reductions
- Other reasonable rules

SW Controls

- Increased Monitoring
- Conservation Measures
- Other Reasonable Restrictions

WHAT ARE YOU WILLING TO DO?

SPG GUIDANCE



FIRST INCREMENT

Costs have ranged from \$10's to \$1,000's per AF

SECOND INCREMENT

- Most excess flows have been committed to projects in the first increment
- Incentive programs are willing seller willing buyer
- Cost to maintain the projects that are currently in place

OVERALL

Costs are likely to increase

STATUTE 46-715 INTERPRETATION

WATER USE & SUPPLY BALANCE



NONE

Use none of the water in the system

TARGET SPECTRUM

Where we are on the 'Target Spectrum' is determined by stakeholders' value of the following as referenced in § 46-715:

- ✓ **Economic Viability**
- ✓ **Social & Environmental Health**
- ✓ **Safety**
- ✓ **Welfare of the Basin**

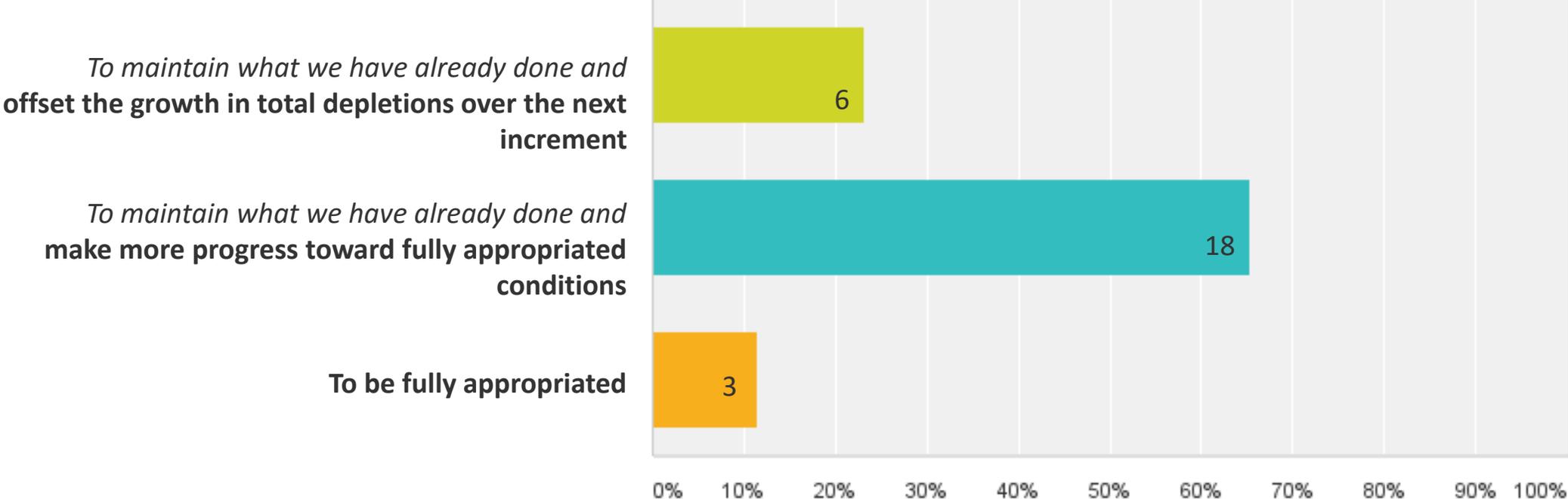
ALL

Use all of the water in the system

REVIEW OF MARCH '17 SURVEY

Q1: What should the overall intent of the Second Increment Plan be?

Answered: 27 Skipped: 0



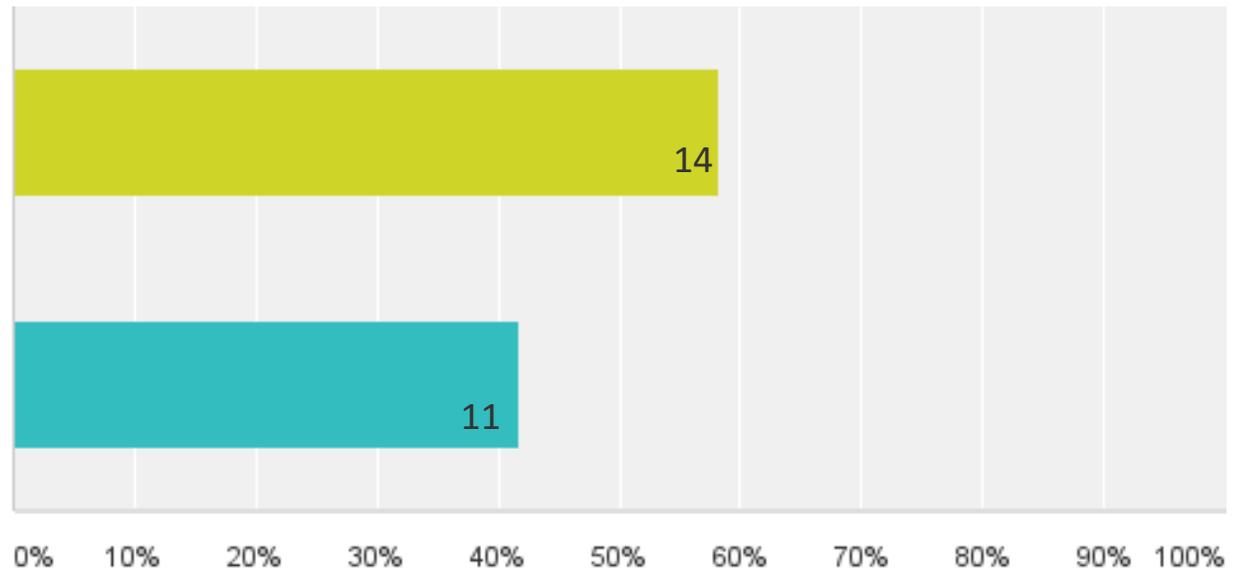
Q2: The benefit of activities undertaken during the first increment to offset post-1997 use depletions are estimated to be in the range of 33,000-110,000 acre-feet annually. What is a reasonable target for additional progress during the second increment?

Answered: 25 Skipped: 2

I do not believe we need to make additional progress.

The target for the second increment should be:

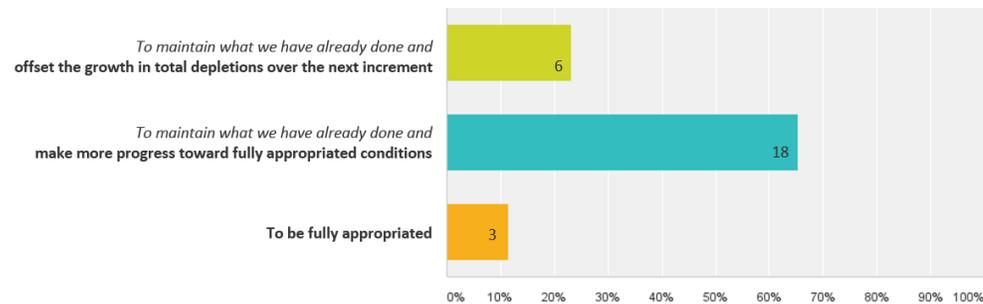
- 10,000
- 25,000
- 50,000 (two respondents said this)
- 120,000
- 150,000
- 100,000-150,000
- 33,000-110,000



REVIEW OF MARCH SURVEY

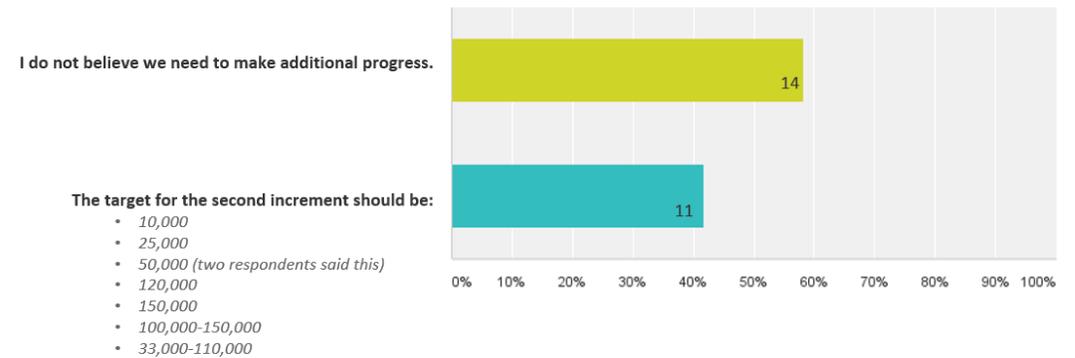
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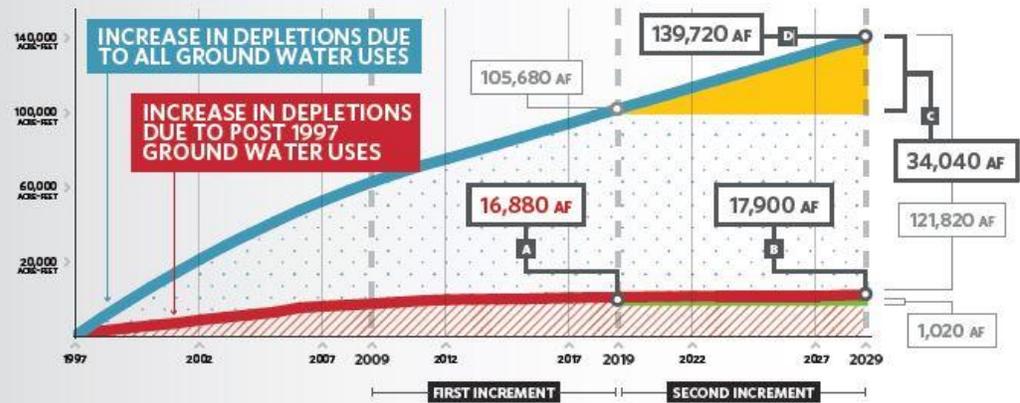


UPPER PLATTE BASIN

Growth In Depletions

BACKGROUND: The First Increment of the Upper Platte basin-wide plan was adopted in 2009. It is a requirement that a technical analysis of the first basin-wide plan must occur in the ten years following its adoption. This technical analysis is needed to determine the path forward in order to achieve the goals and objectives set for the plan. First Increment efforts also worked to establish the overall difference between current and fully appropriated levels of development.

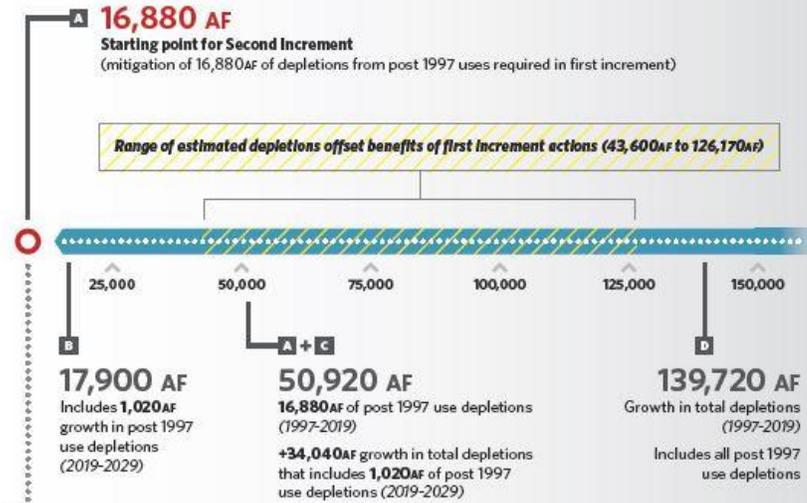
-  First increment depletions offset - post 1997 uses (required by statute)
-  Second increment depletions offset - post 1997 uses (required by statute)
-  Depletions due to uses in place prior to 1997
-  Growth in depletions during second increment due to all Ground Water use (2019-2029)



Total depletions from all Ground Water uses in 1997 estimated 391,470 ac-ft. Data used to estimate increases in depletions due to all Ground Water uses is from the results of the most recent COHYST and WWUM models (2015). Data used to estimate increases in depletions due to post-1997 Ground Water uses is from previous analysis conducted by R. R. Luckey (2008). The robust review currently underway will provide updated data for both of these depletions estimates.

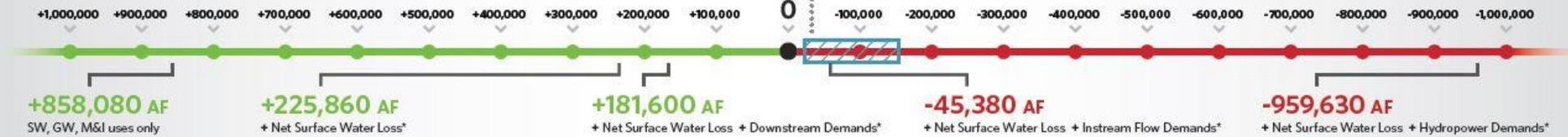
SECOND INCREMENT

The Single Planning Group will help define the progress towards fully appropriated conditions to be made during the second increment.



SUPPLY & DEMAND BALANCE

The Single Planning Group will help define the progress towards fully appropriated conditions to be made during the second increment. The scale below shows values taken from the Basin-Wide Supply and Demand Analysis.



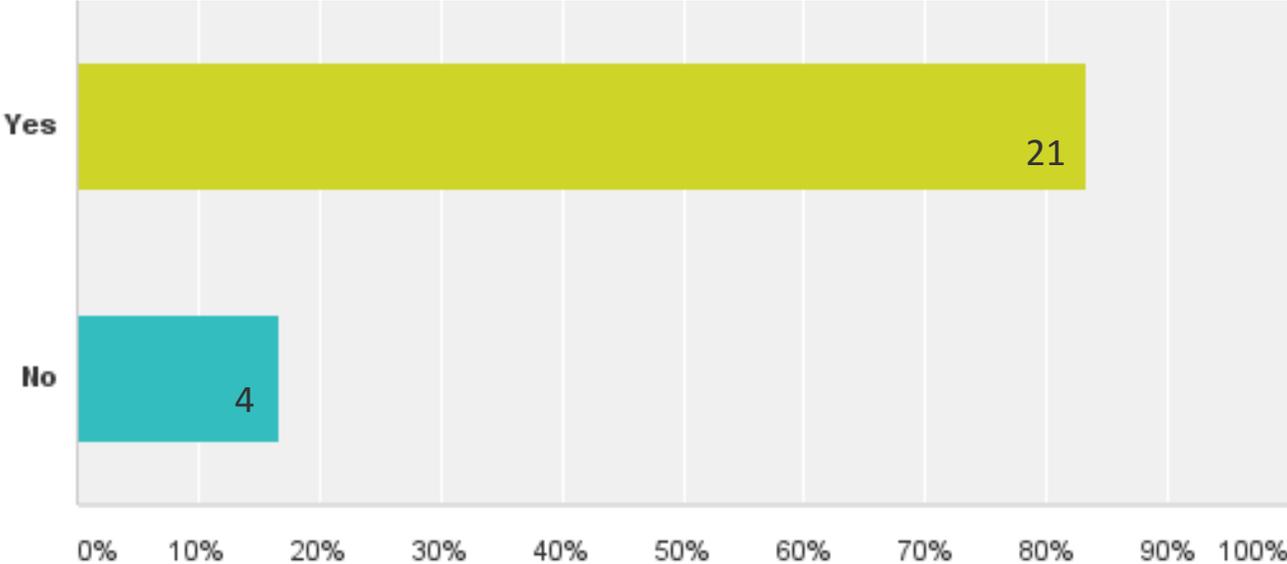
* All figures reflect the average annual difference when comparing supplies with Surface Water (SW), Ground Water (GW), and Municipal and Industrial (M&I) consumptive uses.



III. CONTINUED WORK ON DEFINITIONS FOR ADDITIONAL ELEMENTS

Q4: Does the first increment plan appropriately address the call to maintain the social and environmental health of the river basin?

Answered: 25 Skipped: 2

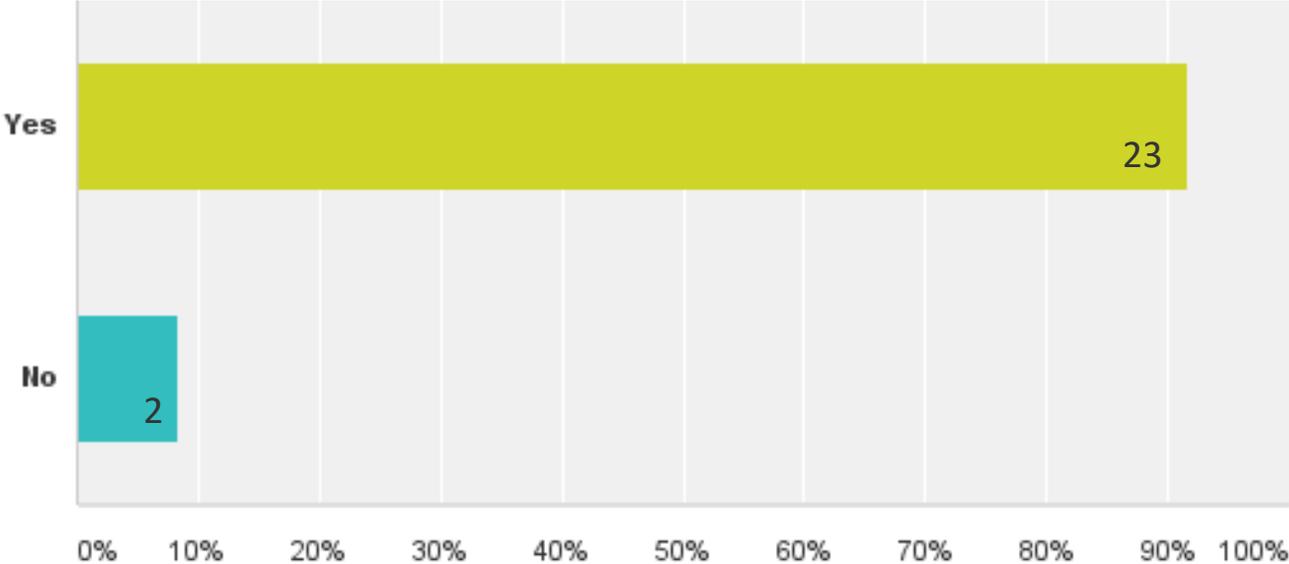


WHEN IS THE SOCIAL AND ENVIRONMENTAL HEALTH OF THE BASIN VULNERABLE?

- There is not enough flow necessary to:
 - Maintain water quality for human consumption and ecosystem health
 - Serve agricultural, municipal, and industrial needs
 - Provide recreational opportunities
 - Maintain water quality

Q5: Does the first increment plan appropriately address the call to maintain the safety of the river basin?

Answered: 25 Skipped: 2

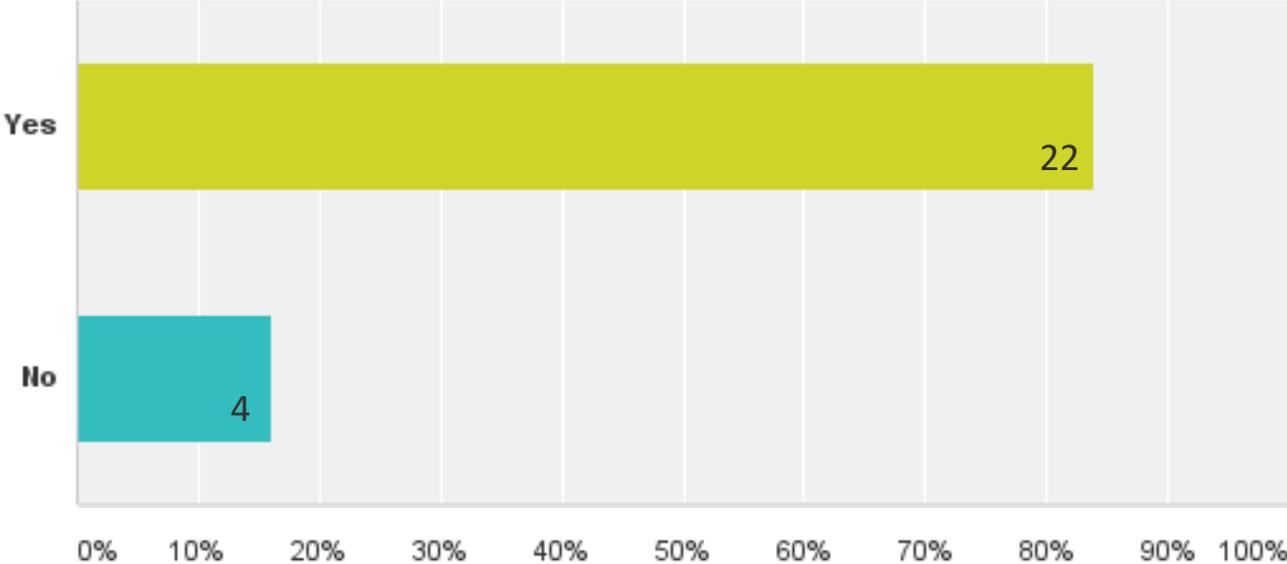


WHEN IS THE SAFETY OF THE BASIN VULNERABLE?

- When there is not enough flow necessary:
 - For fire suppression
 - To maintain water quality that supports public health

Q6: Does the first increment plan appropriately address the call to maintain the welfare of the river basin?

Answered: 26 Skipped: 1



WHEN IS THE WELFARE OF THE BASIN VULNERABLE?

- When water shortage causes a decline in Ag production such that the basin cannot maintain its population.



IV. NEXT STEPS

ISSUES TO BE ADDRESSED

SECOND INCREMENT

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V. PUBLIC COMMENT